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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/704,888 | 11/01/2000 | Richard C. Jaworski | 21-005 | 4649 |

22898 7590 03/23/2005

THE LAW OFFICES OF MIKIO ISHIMARU
1110 SUNNYVALE-SARATOGA ROAD
SUITE A1
SUNNYVALE, CA 94087

EXAMINER

KERVEROS, JAMES C

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2133 | |

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/704,888

Applicant(s)

JAWORSKI ET AL.

Examiner

JAMES C KERVEROS

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 15-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/16/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a Non-Final Office Action in response to the present US Application filed 11/1/2000. Claims 1-14 are under examination. Claims 15-35 are withdrawn. Claims 1-35 are pending.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-14, drawn to a method for determining the performance of a portion of a network using a block error rate test, classified in class 714, subclass 716.
- II. Claims 15-35, drawn to an apparatus for determining the performance of a portion of a network using a forward error corrector and comparator, classified in class 714, subclass 704.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In this instant case, the method can employ a block error rate test for determining the performance of a portion of a network without requiring the forward error corrector and comparator of the apparatus.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with MIKIO ISHIMARU on March 17, 2005 a provisional election was made without traverse to prosecute the invention of Invention I, Claims 1-14. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-35 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Ott (US Patent NO: 6,182,264, issued: January 30, 2001, filed: May 22, 1998)

Regarding independent Claim 1, Ott discloses a method for smart dynamic selection of error correction related to digital enhanced cordless telephony (DECT), and other error-prone bi-directional data transmission systems, comprising:

Transmitting a signal from data stream source 101 of a transmitter via a transmission channel 113 of a network, Figure 1.

Receiving the signal at a receiver data stream 118, Figure 1.

Returning the signal via feedback channel 114 to the transmitter.

Correcting errors based upon a detected error rate (e.g., bit error rate) in receiver data stream 118 and the signal quality of transmission channel 113, as determined by error/signal quality detector 117, which determines the error rate in receiver data stream 118 as system 100 operates and select control 115 and 109 dynamically update the currently selected encoder-decoder pair via feedback channel 114 in order to coordinate the encoder-decoder pair to be used.

Regarding Claim 2, Ott discloses determining the performance of the transmission channel 113 of the network using the corrected signal, as determined by error/signal quality detector 117.

Regarding Claim 3, Ott discloses correcting step uses forward error correction techniques using a CRC Cyclic Redundancy Check by employing a CRC encoder 102 in the transmitter and a corresponding CRC decoder 110 in the receiver and using the CRC Cyclic Redundancy Check for calculating local check sum and comparing to transmitted check sum to detect errors in received data RS Reed-Solomon block code forward error correction.

Regarding Claim 4, Ott discloses discarding error by employing an Automatic Repeat Request (RS+ARQ encoder 104) in the transmission device coupled to a corresponding (RS+ARQ decoder 112) in the receiving device via a transmission channel 113, and using redundancy in the transmitted data to detect and remove errors in received data ARQ Automatic Repeat Request, by asking for re-transmission of data received with uncorrectable errors.

Regarding Claim 5, Ott discloses error/signal quality detector 117 for detecting error rate (e.g., bit error rate) in receiver data stream 118, Figure 1.

Regarding independent Claim 6, Ott discloses a method for smart dynamic selection of error correction related to digital enhanced cordless telephony (DECT), and other error-prone bi-directional data transmission systems, comprising:

Transmitting a signal from data stream source 101 of a transmitter via a transmission channel 113 of a network, Figure 1.

Receiving the signal at a receiver data stream 118, Figure 1.

Returning the signal via feedback channel 114 to the transmitter.

Detecting error rate (e.g., bit error rate) in receiver data stream 118 and the signal quality of transmission channel 113, as determined by error/signal quality detector 117, which determines the error rate in receiver data stream 118 as system 100 operates and select control 115 and 109 dynamically update the currently selected encoder-decoder pair via feedback channel 114 in order to coordinate the encoder-decoder pair to be used.

Discarding error by employing an Automatic Repeat Request (RS+ARQ encoder 104) in the transmission device coupled to a corresponding (RS+ARQ decoder 112) in the receiving device via a transmission channel 113, and using redundancy in the transmitted data to detect and remove errors in received data ARQ Automatic Repeat Request, by asking for re-transmission of data received with uncorrectable errors.

Determining the errors and the non-errors using an error/signal quality detector 117, which determines the error rate in receiver data stream 118, and using an Automatic Repeat Request (RS+ARQ) method to detect and remove errors.

Regarding Claims 7, 8, Ott discloses a network transmission channel 113, Figure 1, which is applicable to digital enhanced cordless telephony (DECT), but also other error-prone bi-directional data transmission systems are applicable, such as a cable

link, which is a local area cable loop, including transmission channel 113 and receiving channel 114, Figure 1.

Regarding Claims 9, 10, 11, Ott discloses determining the performance of the upstream channel (transmission channel 113), wherein the transmitting step transmits the signal in the upstream channel, such as from the data stream source 101 of the transmitter via the transmission channel 113 to the receiver data stream 118, of the receiver, and wherein returning the signal via feedback channel 114 to the transmitter, Figure 1.

Regarding Claim 12, Ott discloses a receiver, which is functionally equivalent to a cable modem termination system, Figure 1.

Regarding Claim 13, Ott discloses correcting step uses forward error correction techniques using a CRC Cyclic Redundancy Check by employing a CRC encoder 102 in the transmitter and a corresponding CRC decoder 110 in the receiver and using the CRC Cyclic Redundancy Check for calculating local check sum and comparing to transmitted check sum to detect errors in received data RS Reed-Solomon block code forward error correction.

Regarding Claim 14, Ott discloses a method, which repeats steps of claim 6.

Conclusion

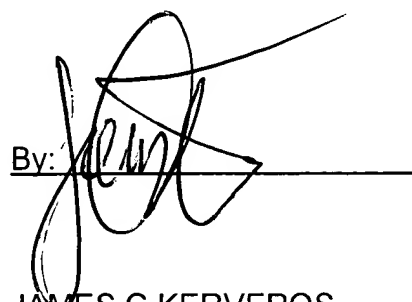
Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES C KERVEROS whose telephone number is (571) 272-3824. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Randolph Building
401 Dulany Street,
Alexandria, VA 22314
Tel.: (571) 272-3824, Fax: (571) 272-3824
Email: james.kerveros@uspto.gov

Date: 18 March 2005
Office Action: Non-Final Rejection

By: 
JAMES C KERVEROS
Examiner
Art Unit 2133

Greg J. Lamarre
Primary Examiner